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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/805,608	ZHA ET AL.	
	Examiner	Art Unit	
	David L. Sorkin	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/19 & 4/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 4 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the original application was filed, had possession of the claimed invention.

Regarding claim 4, while periodic drain down is described in the specification as originally filed, "continuous draindown" is not described.

Regarding claim 7, "continuous overflow" is not described in the specification as originally filed.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of these claims is unclear because there is lack of antecedent basis for "the module", recited in claims 18 and 19.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 9-16, 18-26, 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sunaoka et al. (US 5,209,852). Regarding claim 1, Sunaoka ('852) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 26-27) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 10, lines 58-64); providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 47-52; col. 8, lines 5-19); and removing dislodged accumulated solids from the vessel (see col. 1, lines 40-43; col. 3, lines 52-55; col. 8, lines 63-67). Regarding claim 2, the removing step comprises draining down liquid from the vessel (see col. 1, lines 40-43; col. 3, lines 52-55; col. 8, lines 63-67). Regarding claim 3, the draining down comprises a period draining down (see col. 11, lines 32-46). Regarding claim 9, the backwashing comprises backwashing with a liquid (see col. 10, lines 61-64). Regarding claim 10, the liquid comprises permeate (see col. 10, lines 61-64). Regarding claim 11 the steps of backwashing and providing gas bubbles to the membrane occur simultaneously (see

col. 10, line 61). Regarding claim 12, the porous hollow fiber membranes extend longitudinally in an array to form a membrane module (1) contained in the vessel (see col. 6, lines 12-55; Figs. 1 and 2). Regarding claim 13, the membranes are mounted in a header (5,8) in close proximity to one another so as to prevent excessive movement therebetween (see Fig. 1; col. 11, lines 15-20). Regarding claim 14, the gas bubbles move past the outer surfaces of the membranes and vibrate the membranes to dislodge the accumulated solids therefrom (see col. 8, lines 13-19). Regarding claim 15, the membranes are mounted relative to one another so as to produce a rubbing effect when vibrated (see col. 11, lines 15-20). Regarding claim 16, the hollow fiber membranes are arranged in at least one bundle (see col. 11, lines 15-20). Regarding claim 18, gas bubbles are provided from within the module through gas distribution holes (7) or openings in a header (5,8). Regarding claim 19, gas bubbles are provided from within the module through at least one tube (5,8 and/or 13) situated within the module. Regarding claim 20, the tube comprises a plurality of holes (7). Regarding claim 21, the tube comprises a comb of tubes (13). Regarding claim 22, the membranes are subjected to a chemical cleaning (see col. 11, lines 49-50). Regarding claim 23, the membranes are subjected to a chemical dosing (see col. 11, lines 49-50). Regarding claim 24, the gas bubbles are continuously provided (see col. 10, line 36). Regarding claim 25, the gas bubbles are intermittently provided (see col. 10, line 36). Regarding claim 26, Sunaoka ('852) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 26-27) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the

membranes so with a liquid as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 10, lines 58-64); providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 47-52; col. 8, lines 5-19); and removing dislodged accumulated solids from the vessel (see col. 1, lines 40-43; col. 3, lines 52-55; col. 8, lines 63-67). Regarding claim 28, Sunaoka ('852) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 26-27) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 10, lines 58-64); thereafter (see col. 1, lines 46-49; col. 10, lines 58-64) providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 47-52; col. 8, lines 5-19); and removing dislodged accumulated solids from the vessel (see col. 1, lines 39-43; col. 3, lines 52-55; col. 8, lines 63-67). Regarding claim 29, Sunaoka ('852) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 26-27) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 10, lines 58-64); thereafter (see col. 1, lines 46-49; col. 10, lines 58-64) providing, by means other than gas passing through the pores of the membranes, gas bubbles to the

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membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 47-52; col. 8, lines 5-19); and removing dislodged accumulated solids from the vessel (see col. 1, lines 39-43; col. 3, lines 52-55; col. 8, lines 63-67).

7. Claims 1-3, 5-7, 9-16, 18-27, 26, 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sunaoka et al. (US 5,151,191). Regarding claim 1, Sunaoka ('191) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 27-29) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 9, lines 7-12); providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 34-42; col. 7, lines 27-49); and removing dislodged accumulated solids from the vessel (col. 3, lines 39-43; col. 7, lines 45-58). Regarding claim 2, the removing step comprises draining down liquid from the vessel (col. 7, lines 45-58). Regarding claim 3, the draining down comprises a period draining down (see col. 9, lines 53-60). Regarding claim 5, the removing step comprises overflowing liquid from the vessel (see col. 7, lines 15-20). Regarding claim 6, the overflowing comprised period overflow (see col. 7, lines 15-17). Regarding claim 7, the overflowing comprises a continuous overflow (see col. 7, lines 17-20). Regarding claim 9, the backwashing comprises backwashing with a liquid (see col. 9, lines 7-12). Regarding claim 10, the liquid comprises permeate (see col. 9, lines 7-12). Regarding claim 11 the steps of backwashing and providing gas bubbles to the membrane occur

simultaneously (see col. 9, line 9). Regarding claim 12, the porous hollow fiber membranes extend longitudinally in an array to form a membrane module (1) contained in the vessel (see col. 5, lines 19-54; Figs. 1 and 2). Regarding claim 13, the membranes are mounted in a header (5,8) in close proximity to one another so as to prevent excessive movement therebetween (see Fig. 1; col. 9, lines 34-38). Regarding claim 14, the gas bubbles move past the outer surfaces of the membranes and vibrate the membranes to dislodge the accumulated solids therefrom (see col. 7, lines 34-45). Regarding claim 15, the membranes are mounted relative to one another so as to produce a rubbing effect when vibrated (see col. 9, lines 34-38). Regarding claim 16, the hollow fiber membranes are arranged in at least one bundle (see col. 9, lines 34-38). Regarding claim 18, gas bubbles are provided from within the module through gas distribution holes (7) or openings in a header (5,8). Regarding claim 19, gas bubbles are provided from within the module through at least one tube (5,8 and/or 13) situated within the module. Regarding claim 20, the tube comprises a plurality of holes (7). Regarding claim 21, the tube comprises a comb of tubes (13). Regarding claim 22, the membranes are subjected to a chemical cleaning (see col. 9 lines 67-68). Regarding claim 23, the membranes are subjected to a chemical dosing (see col. 9, lines 67-68). Regarding claim 26, Sunaoka ('191) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 27-29) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes with a liquid so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 9, lines 7-12);

providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 34-42; col. 7, lines 27-49); and removing dislodged accumulated solids from the vessel (col. 3, lines 39-43; col. 7, lines 45-58). Regarding claim 28, Sunaoka ('191) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 27-29) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 9, lines 7-12); thereafter providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 34-42; col. 7, lines 27-49); and thereafter removing dislodged accumulated solids from the vessel (col. 3, lines 39-43; col. 7, lines 45-58). Regarding claim 29, Sunaoka ('191) discloses a method of removing accumulated solids from outer surfaces (see col. 1, lines 27-29) of porous hollow fiber membranes (2), wherein the membranes are situated in a vessel (9), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 1, lines 46-49; col. 9, lines 7-12), while simultaneously providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (see col. 3, lines 34-42; col. 7, lines 27-49); and thereafter removing dislodged accumulated solids from the vessel (col. 3, lines 39-43; col. 7, lines 45-58).

8. Claims 1, 2, 9, 10, 12-21, 26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohkubo et al. (US 4,876,006). Regarding claim 1, Ohkubo ('006) discloses a method of removing accumulated solids from outer surfaces (see col. 4, lines 50-51) of porous hollow fiber membranes (1), wherein the membranes are situated in a vessel (20), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 4, lines 55-57); providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (col. 4, lines 61-67); and removing dislodged accumulated solids from the vessel (see col. 4, lines 12-13; col. 6, lines 20-21). Regarding claim 2, the removing step comprises draining down liquid from the vessel (see col. 4, lines 12-13; col. 6, lines 20-21; Fig. 5). Regarding claim 9, the backwashing comprises backwashing with a liquid (see col. 4, lines 55-61). Regarding claim 10, the liquid comprises permeate (see col. 4, lines 10-11, 55-61). Regarding claim 12, the porous hollow fiber membranes extend longitudinally in an array to form a membrane module (10) contained in the vessel (see col. 3, lines 6-9). Regarding claim 13, the membranes are mounted in a header (2,3) in close proximity to one another so as to prevent excessive movement therebetween (see Figs. 3, 4). Regarding claim 14, the gas bubbles move past the outer surfaces of the membranes and vibrate the membranes to dislodge the accumulated solids therefrom (see col. 4, lines 61-68). Regarding claim 15, the membranes are mounted relative to one another so as to produce a rubbing effect when vibrated (see Figs. 3 and 4). Regarding claim 16, the hollow fiber membranes are

arranged in at least one bundle (1a). Regarding claim 17, the hollow fiber membranes are surrounded by a perforated cage (9). Regarding claim 18, gas bubbles are provided from within the module through gas distribution holes or openings in a header (14). Regarding claim 19, gas bubbles are provided from within the module through at least one tube (15,16,18) situated within the module. Regarding claim 20, the tube comprises a plurality of holes (see Figs. 5,8). Regarding claim 21, the tube comprises a comb of tubes (15,18). Regarding claim 26, Okhubo ('006) discloses a method of removing accumulated solids from outer surfaces (see col. 4, lines 50-51) of porous hollow fiber membranes (1), wherein the membranes are situated in a vessel (20), the method comprising backwashing the membranes with a liquid so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 4, lines 55-57); providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer surfaces of the membranes (col. 4, lines 61-67); and removing dislodged accumulated solids from the vessel (see col. 4, lines 12-13; col. 6, lines 20-21). Regarding claim 28, Okhubo ('006) discloses a method of removing accumulated solids from outer surfaces (see col. 4, lines 50-51) of porous hollow fiber membranes (1), wherein the membranes are situated in a vessel (20), the method comprising backwashing the membranes so as to dislodge accumulated solids from the outer surfaces of the membranes (see col. 4, lines 55-57); thereafter providing, by means other than gas passing through the pores of the membranes, gas bubbles to the membranes, wherein the gas bubbles scour the outer

surfaces of the membranes (col. 4, lines 61-67); and thereafter removing dislodged accumulated solids from the vessel (see col. 4, lines 12-13; col. 6, lines 20-21).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sunaoka et al. (US 5,209,852). The method of Sunaoka ('852) was discussed above with regard to claim 1. Sunaoka ('852) does not explicitly state that the draining is "continuous". *In re Dilnot* 138 USPQ 248 (CCPA 1963) is relied upon for its holding that making a process step be "continuous" would have been obvious over prior art otherwise disclosing the process.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sunaoka et al. (US 5,151,191). The method of Sunaoka ('191) was discussed above with regard to claim 1. Sunaoka ('191) does not explicitly state that the draining is "continuous". *In re Dilnot* 138 USPQ 248 (CCPA 1963) is relied upon for its holding that making a process step be "continuous" would have been obvious over prior art otherwise disclosing the process.

12. Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunaoka et al. (US 5,209,852). Note claims 8 and 27 are considered be of the same scope. The method of Sunaoka ('852) was discussed above with regard to claim 1.

Sunaoka ('852) discloses backwashing with a liquid rather than a gas. Applicant admits one page 13, lines 14-16 of the instant specification that backwashing with liquid and backwashing with gas are "standard" art recognized backwashing methods; therefore it is considered that it would have been obvious to one of ordinary skill in the art to have backwashed the membranes of Sunaoka ('852) with a gas instead of a liquid.

13. Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunaoka et al. (US 5,151,191). Note claims 8 and 27 are considered be of the same scope. The method of Sunaoka ('191) was discussed above with regard to claim 1. Sunaoka ('191) discloses backwashing with a liquid rather than a gas. Applicant admits one page 13, lines 14-16 of the instant specification that backwashing with liquid and backwashing with gas are "standard" art recognized backwashing methods; therefore it is considered that it would have been obvious to one of ordinary skill in the art to have backwashed the membranes of Sunaoka ('191) with a gas instead of a liquid.

14. Claims 8 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al. (US 4,876,006). Note claims 8 and 27 are considered be of the same scope. The method of Ohkubo ('006) was discussed above with regard to claim 1. Ohkubo ('006) discloses backwashing with a liquid rather than a gas. Applicant admits one page 13, lines 14-16 of the instant specification that backwashing with liquid and backwashing with gas are "standard" art recognized alternative backwashing methods; therefore it is considered that it would have been obvious to one of ordinary skill in the art to have backwashed the membranes of Ohkubo ('006) with a gas instead of a liquid.

Double Patenting

15. Claims 1-29 of this application conflict with claims 1-29 of Application No. 10/793,105. The claim sets are word-for-word identical. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

16. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

17. Claims 1-29 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-29 of copending Application No. 10/793,015, respectively. The respective claims are word-for-word identical. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

18. Applicant is advised that should claim 8 be found allowable, claim 27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both

cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k). Dependent claim 8, when properly considered to include all the limitations of its parent claim 1, has the same scope as independent claim 27.

19. Likewise, applicant is advised that should claim 9 be found allowable, claim 26 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

Dependent claim 9, when properly considered to include all the limitations of its parent claim 1, has the same scope as independent claim 26.

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

21. Claims 1-3, 5, 6, and 8-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/369,813. Particularly, claim 36 of 10/369,813 includes all the limitations of each of instant claims 1 and 5. Claim 61 of 10/369,813 includes all the limitations of instant claim 2; Claim 68 of 10/369,813 includes all the limitations of instant claim 3; Claim 65 of 10/369,813 includes all the limitations of instant claim 6;

Claim 43 of 10/369,813 includes all the limitations of instant claim 8 and 27; Claim 44 of 10/369,813 includes all the limitations of each of instant claims 9 and 26; Claim 45 of 10/369,813 includes all the limitations of instant claim 10; Claim 46 of 10/369,813 includes all the limitations of instant claim 11; Claim 47 of 10/369,813 includes all the limitations of instant claim 12; Claim 48 of 10/369,813 includes all the limitations of instant claim 13; Claim 49 of 10/369,813 includes all the limitations of instant claim 14; Claim 50 of 10/369,813 includes all the limitations of instant claim 15; Claim 51 of 10/369,813 includes all the limitations of instant claim 16; Claim 52 of 10/369,813 includes all the limitations of instant claim 17; Claim 53 of 10/369,813 includes all the limitations of instant claim 18; Claim 54 of 10/369,813 includes all the limitations of instant claim 19; Claim 55 of 10/369,813 includes all the limitations of instant claim 20; Claim 56 of 10/369,813 includes all the limitations of instant claim 21; Claim 57 of 10/369,813 includes all the limitations of instant claim 22. Claim 58 of 10/369,813 includes all the limitations of instant claim 23; Claim 59 of 10/369,813 includes all the limitations of instant claim 24; Claim 60 of 10/369,813 includes all the limitations of instant claim 25; Claim 61 of 10/369,813 includes all the limitations of each of instant claims 9 and 26; and Claim 63 of 10/369,813 includes all the limitations of instant claim 28.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Sorkin

David L. Sorkin
Examiner
Art Unit 1723